DO NOT ENTER
H.C.
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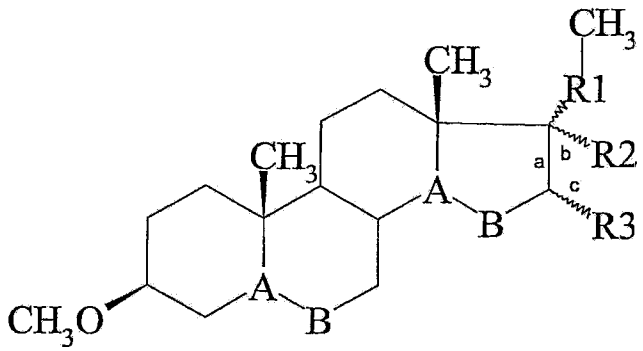
AMENDMENTS TO THE CLAIMS:

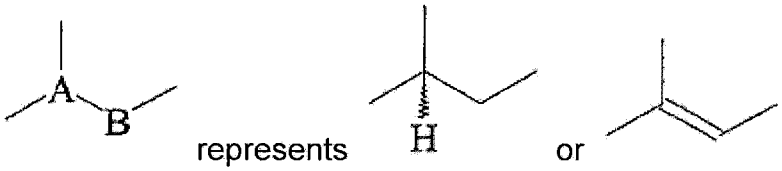
This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A method for treating an acute or chronic lesion or a degenerative disease of the nervous system ~~by stimulating the polymerization and/or the stabilization of microtubules~~ in a patient, comprising ~~the administration to said~~ administering to the patient ~~of an effective quantity of a drug~~ a composition comprising 3β-methoxy-pregna-5-ene-20-one (3-methoxy-PREG) or a molecule derived from pregnenolone that contains a 3-methoxy function and is incapable of being converted into a metabolite or ester sulfate of pregnenolone, wherein said molecule derived from pregnenolone is of formula I:



(I)

in which:



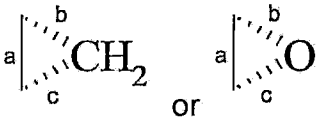
represents or

R1 = –CO–; –CH(OH)– or –CH(O-$COCH_3$)–

R2 = H or $CHCl_2$,

R3 = H or CH_3, or

R2 and R3 together form a ring:



wherein the composition is administered to the patient in an amount effective to stimulate polymerization and/or stabilization of microtubules in the patient.

2. (Previously Presented) The method according to claim 1, wherein said disease or lesion is selected from the group comprising Alzheimer's disease, Parkinson's disease, age-induced memory loss, memory loss induced by the taking of substances, a traumatic lesion, a cerebral lesion, a lesion of the spinal cord, in particular medullary compression, ischemia, pain, notably neuritic pain, nerve degeneration, and multiple sclerosis.

3. (Currently amended) The method according to claim 1, wherein said ~~drug~~ composition also comprises an excipient that makes it possible to formulate the molecule derived from pregnenolone to cross the blood-brain barrier.

4. (Currently amended) The method according to claim 1, wherein said ~~drug~~ composition is administered by injection.

5. (Currently amended) The method according to claim 1, wherein said ~~drug~~ composition is administered orally.

6. (Previously Presented) The method according to claim 1, wherein said molecule of formula I is 3-methoxy-PREG.

7. (Withdrawn) The method according to claim 1, wherein said molecule of formula I is 3β-methoxy-pregna-5-ene-20-one-17α-dichloromethyl.

8. (Currently amended) The method according to claim 1, wherein said ~~drug~~ composition comprises a quantity of 3-methoxy-PREG or of said molecule of formula I ranging between 50 and 2500 mg.

9-10. (Cancelled)

11. (Withdrawn) An in vitro method for increasing the stabilization and/or inducing the polymerization of the microtubules in a cell, comprising the step of exposing the aforementioned cell to the presence of 3-methoxy-pregnenolone at a concentration of approximately 0.5 to 50 µmol.

12. (Withdrawn) An in vitro method for increasing neuritic sprouting in a cell, comprising the step of exposing the aforementioned cell to the presence of 3-methoxy-pregnenolone at a concentration of approximately 0.5 to 50 µmol.